(19) World Intellectual Property Organization International Bureau



- 1 EE 69 BILLIEU IL BILLIE KER ALII BELLIE BILLIE BILLIE BILLIE BILLIE BILLIE BILLIE BILLIE BILLIE BILLIE BIL

(43) International Publication Date 24 February 2005 (24.02.2005)

PCT

(10) International Publication Number WO 2005/017060 A1

(51) International Patent Classification⁷: C08K 3/00

C09J 7/02,

(21) International Application Number:

PCT/US2004/021016

(22) International Filing Date: 30 June 2004 (30.06.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 2003-206774

8 August 2003 (08.08.2003) J

- (71) Applicant (for all designated States except US): 3M IN-NOVATIVE PROPERTIES COMPANY [US/US]; 3M Center, Post Office Box 33427, Saint Paul, MN 55133-3427 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): NAKAMURA, Sawako [JP/JP]; 8-8, Minami Hashimoto, 3-chome, Sagamihara, Kanagawa 229-1185 (JP).
- (74) Agents: HARTS, Dean M., et al.; Office of Intellectual Property Counsel, Post Office Box 33427, Saint Paul, MN 55133-3427 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HALOGEN-FREE FLAME-RETARDANT ACRYLIC PRESSURE-SENSITIVE ADHESIVE SHEET OR TAPE

(57) Abstract: The object of the present invention is to provide a flame-retardant pressure-sensitive adhesive sheet or tape that has adequate adhesive performance without containing a halogen-based flame retardant. In a first aspect of the present invention, a flame-retardant pressure-sensitive adhesive sheet or tape is provided that comprises an acrylic polymer containing units originating in alkyl(meth)acrylate monomer, nitrogen-containing monomer and carboxyl group-containing monomer, and a metal hydrate compound. In a second aspect of the present invention, a flame-retardant pressure-sensitive adhesive tape or sheet comprises a flame retardant-containing pressure-sensitive adhesive layer containing an acrylic polymer containing units originating in alkyl(meth)acrylate monomer and nitrogen-containing monomer or carboxyl group-containing monomer, and a metal hydrate compound; rad, a second pressure-sensitive adhesive layer in contact with at least a portion of at least one side of the flame retardant-containing pressure-sensitive adhesive layer and containing an acrylic polymer containing units originating in alkyl(meth)acrylate monomer and carboxyl group-containing monomer or nitrogen-containing monomer.

